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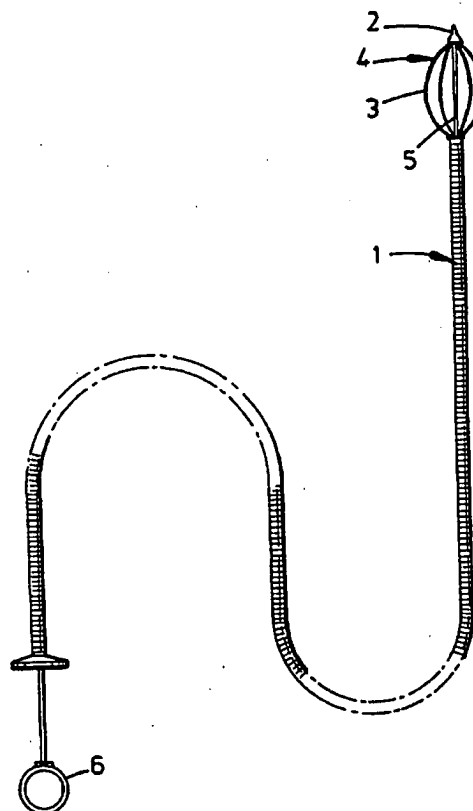
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : A61B 17/39, 17/22	A3	(11) International Publication Number: WO 95/02370 (43) International Publication Date: 26 January 1995 (26.01.95)
(21) International Application Number: PCT/GB94/01536 (22) International Filing Date: 15 July 1994 (15.07.94) (30) Priority Data: 9314640.5 15 July 1993 (15.07.93) GB (71)(72) Applicant and Inventor: SALIM, Aws, Shakir, Mustafa [IQ/GB]; 2 Dene Walk, Bishopbriggs, Glasgow G64 1LQ (GB). (74) Agents: McCALLUM, William, Potter et al.; Cruikshank & Fairweather, 19 Royal Exchange Square, Glasgow G1 3AE (GB).	(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD). Published <i>With international search report.</i> (88) Date of receipt of the international search report: 9 March 1995 (09.03.95)	

(54) Title: **TUNNELLING CATHETER**

(57) Abstract

The present invention relates to a diathermy tunnelling catheter device (1). The device (1) has a remotely radially expandable basket (4) with a diathermic cutting and coagulating tip (2) and a plurality of spaced apart diathermic cutting and coagulating bars (3) extending rearwardly from said tip (2). In use the basket (4) is initially advanced into a growth in a radially contracted condition by diathermic cutting with said basket tip (2), the basket (4) is then radially expanded whilst radially cutting diathermically with the cutting bars (3) into the growth, and the basket (4) is then rotated whilst annularly cutting diathermically with the cutting bars (3). Conveniently the device (1) is used via the biopsy channel of an endoscope.



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INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 94/01536

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A61B17/39 A61B17/22

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US,A,4 885 003 (HILLSTEAD) 5 December 1989 see column 5, paragraph 1 -paragraph 5 ---	1-10
Y	US,A,5 030 201 (PALESTRANT) 9 July 1991 see abstract; figures 1,2,6 ---	1-10
A	WO,A,90 07909 (APPLIED UROLOGY) 26 July 1990 see page 4, line 22 - line 29 see page 7, line 5 - line 7; figures 3-6 ---	1
A	EP,A,0 117 519 (THEERMANN) 5 September 1984 see page 14; figure 6 see page 16, paragraph 2 ---	1
A	US,A,5 224 945 (PANNEK) 6 July 1993 -----	

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

14 December 1994

Date of mailing of the international search report

23.12.94

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/GB94/01536

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 11
because they relate to subject matter not required to be searched by this Authority, namely:
see Rule 39.1 (iv) PCT.
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

In ternational Application No
PCT/GB 94/01536

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A-4885003	05-12-89	NONE	
US-A-5030201	09-07-91	NONE	
WO-A-9007909	26-07-90	AU-A- 5098290	13-08-90
EP-A-0117519	05-09-84	DE-A- 3306213 DE-A- 3320984	23-08-84 13-12-84
US-A-5224945	06-07-93	NONE	